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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,740	10/30/2003	Sivapackia Ganapathiappan	10010060-8	9060

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EXAMINER	
ZALUKAEVA, TATYANA	
ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/697,740

Applicant(s)

GANAPATHIAPPAN, SIVAPACKIA

Examiner

Tatyana Zalukaeva

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 is/are allowed.
- 6) ☒ Claim(s) 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 22 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5990202 A to Nguyen et al. Nguyen discloses an ink-jet ink for inkjet printing including a vehicle and a colorant, said colorant encapsulated by or associated with a primer core/shell polymer to form a primer/colorant combination, and said primer/colorant combination, upon printing, encapsulated by a durable core/shell polymer (claim 1)

The polymer is obtained by the following process: In an 250 cm.sup.3 glass jar were added 5.0 g of carbon black (Vulcan XR-72), 25.0 g of a durable core/shell polymer (S1) employed in the practice of the present invention comprising (HA).sub.40 (MMA).sub.40 (PEGAc(404)).sub.20 (10 wt % solid), 10 g diethylene glycol (as non-penetrating humectant), 10 g N-methyl pyrrolidone (NMP, as penetrating humectant), 0.02 g of fluoro surfactant (Fluorad 99; 3M Products). The components were milled together by a paint shaker using 2 mm zirconium beads for 2 hrs. After being milled, the system was diluted with water to achieve a final ink solution of 5 wt % solid.

Table 1 provides for particle sizes, which have values within the claimed range.

Because of the nature of product-by process claims, the Examiner cannot ordinarily focus on the precise difference between the claimed product and the disclosed product.

Art Unit: 1713

It is then Applicants' burden to prove that an unobvious difference exists. See In re Marosi, 218 USPQ 289, 292-293 (CAFC 1983).

See also footnote 11 O.G. Notice 1162 59-61, wherein a 35 USC 102/103 rejection is authorized in the case of product-by-process claims because the exact identity of the claimed product or the prior art product cannot be determined by the Examiner.

The patentability of the product is based on the product per se, and may be anticipated or obvious over the product, which although prepared in a different manner, appeared to be the same (prima facie) as the claimed product In re Thorpe, 227 USPQ 964 (CAFC 1985). See also In re Brown, 173 USPQ 685 (CCPA 1972), the Court of Customs and Patent Appeals (CCPA) explicitly approved the 102/103 rejection of a product-by-process claim over a reference which showed a product which appeared to be identical or only slightly different from the claimed product.

With regard to polydispersity the rejection is made in the sense of Fitzgerald (205 USPQ 594). (CAFC):

It is the base presumption that the properties governing the claimed composition, if not taught, may be very well met by the composition of Ngyuen, since the polymers of Ngyuen are essentially the same and made in essentially the same manner as applicants' polymer. The onus to show that this, in fact, is not the case is shifted to applicants.

### ***Allowable Subject Matter***

3. Claim 23 is allowed.

Art Unit: 1713

The closest prior art to Winnik discloses self-colored polymer particles prepared in accordance with the present invention are useful as liquid developer compositions. These compositions are comprised of nonaqueous solutions of the self-colored polymer particles illustrated herein dispersed in a suitable vehicle, such as Isopar G; and a charge control agent inclusive of a metal soap. Specific examples of liquid ink developer compositions, therefore, include those comprised of a dispersion of colored particles prepared in accordance with the process of the present invention, present in Isopar in an amount of from about 0.3 to about 2 weight percent, which Isopar further includes from about 0.05 to about 0.5 weight percent of a charge control agent such as zirconium octoate (col.7, lines 50-60).

Winnik differs from the instant claim 23 by disclosing non-aqueous composition, vs. aqueous composition recited in claim 23. There is no suggestion to replace Isopar by water in Winnik.

### ***Response to Arguments***

4. Applicant's arguments filed 12/08/2004 with regard to rejection over Nguyen, Winnik and US 20030032716 have been fully considered but they are not persuasive.

Applicants arguments with regard to Nguyen reference reside in contention that particle recited in Nguyen are prepared from comonomers which form the core, then are further prepared by polymerizing the comonomers with another similar monomer to form the core/shell polymer. The particles formed by this method allegedly can not be

Art Unit: 1713

equivalent to the claimed amphipathic particles which are formed by polymerizing a hydrophilic monomer in an ATRP process to form a first polymer, then copolymerizing the first polymer with a hydrophobic monomer through an emulsion process to obtain the claimed amphipathic particle. Applicants further argue that polydispersity of Nguyen's polymers would not be even close to the polydispersity as claimed.

As stated in MPEP "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. In *re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden **shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi***, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983) Compare *Ex parte Gray*, 10 USPQ2d 1922 (Bd. Pat. App. & Inter. 1989) In such cases The Board applied case law pertinent to product-by-process claims, reasoning that the prior art product appeared to differ from the claimed factor only in the method of obtaining the factor. The Board held that the burden of persuasion was on appellant to show that the claimed product exhibited unexpected properties compared with that of the prior art. The Board further noted that "no objective evidence has been provided establishing that no method was known to those skilled in this field whereby the claimed material might have

Art Unit: 1713

been synthesized." 10 USPQ2d at 1926.). Applicant has not presented a valid side-by-side comparison between their particles in terms of polydispersity and particles disclosed by Nguyen, wherein the only difference is the process of making such particles, see *In re Dunn*, 349 F. 2d 433, 146 USPQ 489 (CCPA 1965)

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1713

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva  
Primary Examiner  
Art Unit 1713

A handwritten signature in black ink, appearing to read 'Zalukaeva', with a long, sweeping horizontal stroke extending to the right.

March 23, 2005